

L 28858-66

ACC NR: AP6010408

of volume condensates. At relatively low T_{ev} of alloys containing components with sharply different vapor pressures, their condensates differ considerably in composition from the initial alloys; as T_{ev} increases, this difference diminishes.

Orig. art. has: 6 figures, 1 table.

SUB CODE: 71, 20/ SUBM DATE: 27Apr65/ ORIG REF: 008/ OTH RKF: 001

Card 3/3 CC

L 00735-66 EWP(e)/EWT(m)/EWP(k)/EWP(t)/EWP(z)/EWP(b) IJP(c) JD

ACCESSION NR: AP5022699

UR/0181/65/007/009/2648/2654

50
47
B

AUTHOR: Palatnik, L. S.; Fedorov, G. V.; Bogatov, P. N.

44,53

44,53

44,52

TITLE: Some characteristics of volume condensation of metals and alloys

SOURCE: Fizika tverdogo tela, v. 7, no. 9, 1965, 2648-2654

TOPIC TAGS: powder metal production, lead, antimony, bismuth, vapor condensation

44,55 19

27

27

27

ABSTRACT: When metal is vaporized in a high vacuum where the mean free path is greater than the dimensions of the vacuum equipment, metal vapor condenses in a solid film on the walls. The mean free path of the metal atoms can be reduced by increasing the density of the residual gas. The metal atoms then gradually lose their excess energy through collisions with atoms of inert gas, and are thrown into Brownian movement. When these atoms are sufficiently concentrated, volume condensation takes place, forming an exceptionally fine metal powder. The process of volume condensation of metal vapor may be divided into two stages: 1) the formation of nucleating centers for condensation; 2) growth of these nuclei in the supersaturated vapor. The second stage of the volume condensation process is quite similar to surface condensation of metals, therefore it may be assumed that the general characteristics of metal condensation on a substrate are also true in vol-

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L 00735-66

ACCESSION NR: AP5022699

ume concentration. The authors study some of the characteristics of volume condensation of pure metals and alloys in an inert gas atmosphere (argon). Volume condensation of lead showed a variation in the shape and size of the particles with temperature. When the condensation temperature was 80°C, the particles are well-defined faceted crystals with dimensions of 200-300 Å. At 140°C, there is a mixture of faceted and spherical particles with sizes of 0.1-0.2 μ. At 240°C, the particles are only spherical and measure 0.3-0.5 μ. X-ray analysis shows that the particles are single crystals at 80° and polycrystalline above 80°. This change in the structure and shape of the particles is explained by a change in the condensation mechanism. The two condensation mechanisms are: vapor → crystal; and vapor → liquid (+ crystal). Antimony begins to vaporize at a temperature 100-150°C below the melting point. The particles are rhombic in form and their dimensions increase sharply with temperature. These particles are single crystals which indicates that only the first condensation mechanism (vapor → crystal) operates in the case of antimony. Apparently the triple point lies at a very high vapor pressure, which was not reached in these experiments. Volume condensation of Pb-Sb alloys gives a mechanical mixture of particles of the components. Condensation of a Bi-Sb alloy gives two types of particles. Some particles are a solid solution of antimony in bismuth while others are a solid solution of bismuth in antimony. A

Card 2/3

ACCESSION NR: AP5022699

similar situation was observed in the Pb-Bi system. A theoretical explanation is given for the experimental data. Orig. art. has: 7 figures.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut im. V. I. Lenina (Kharkov Polytechnical Institute)

SUBMITTED: 06Mar65

ENCL: 00

SUB CODE: MM,SS

NO REF Sov: 013

OTHER: 005

SP
Card 3/3

L 17550-66 EWT(m)/EWP(t)
ACC NR: AP6003758

JD
SOURCE CODE: UR/0181/66/008/001/0036/0040

AUTHORS: Palatnik, L. S.; Fedorov, G. V.; Bogatov, P. N.

ORG: Khar'kov Polytechnic Institute im. V. I. Lenin (Khar'kovskiy
politekhnicheskiy institut)

TITLE: Investigation of the mechanism of volume condensation of Cd,
Zn, and Mg

SOURCE: Fizika tverdogo tela, v. 8, no. 1, 1966, 36-40

TOPIC TAGS: cadmium, zinc, magnesium, metal vapor deposition, vapor
condensation, vapor pressure

ABSTRACT: The authors investigated the mechanism of volume condensa-
tion of Cd, Mg, and Zn in an atmosphere of an inert gas. The experi-
mental procedure was essentially the same as in an earlier investiga-
tion (FTT v. 7, 2648, 1965). The condensates were examined with an
optical microscope and an electron microscope (Em-3, resolution 100 Å),
and also by x-ray analysis. The results show that, unlike earlier
investigations by one of the authors (Palatnik, with N. T. Gladkikh

Card 1/2

L 17550-66

ACC NR: AP6003758

FTT v. 4, 222, 1962), where the condensation occurred directly from the vapor phase to the crystal phase, in the present studies, where the metal was evaporated by means of an arc and then condensed, the condensation proceeded via an intermediate liquid stage. The difference in the results is attributed to the fact that with increasing vapor density the critical temperature of the condensation increases, and since magnesium, cadmium, and zinc have very high vapor tensions, the critical condensation temperatures increase so much that it can exceed the melting temperature. This gives rise to a high degree of supersaturation, causing the condensation to proceed via the liquid stage. The results confirm once more that whether a metal condenses via the liquid stage or directly from the vapor stage depends not only on the type of metal, but also on the condensation conditions. Orig. art. has: 2 figures.

SUB CODE: // SUBM DATE: 24Jun65/ ORIG REF: 007/ OTH REF: 002

Card 2/2 net

BOGATOV, V., instruktor

Friendship is not hindered by distance. Za rul. 20 no.1:1-2
Ja '62. (MIRA 15:2)

1. TSentral'nyy komitet Vsesoyuznogo Leninskogo kommunisticheskogo
soyuza molodezhi.
(Russia—Relations(General)with Czechoslovakia)
(Czechoslovakia—Relations(General)with Russia)

BOGATOV, V.I.

Improvement of the registering water meter. Gidroliz. i lesokhim.
prom. 9 no.1:24 '56. (MLRA 9:6)

1. Slessar' po kontrol'no-ismeritel'nym priboram Lobvinskogo
gidroliznogo zavoda.
(Water meters)

L 40832-65 EWT(d)/EWA(d)/EWP(h)/EWP(v)/EWP(k)/EWP(1) pp-4
ACCESSION NR: AP5008213 S/0286/65/000/005/0077/0077

AUTHORS: Bogatov, V. I.; Yegorenkov, I. S.; Kolosova, N. I.

TITLE: Turbine flowmeter, Class 42, 168903

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 77

TOPIC TAGS: flowmeter

ABSTRACT: This Author Certificate presents a turbine flowmeter containing a driving impeller with electric drive, a driven impeller connected to the case of an elastic element whose rotation angle measures the flow, and an impeller rotation angle meter. To exclude the possibility of moisture condensation in the cavity of the impeller rotation angle meter for flow measurement of a medium at low temperatures, the rotation angle meter connected to the driven impeller by a magnetic clutch is contained in a hermetic vacuum chamber which is placed in the flow.

ASSOCIATION: none

SUBMITTED: 18Oct63

ENCL: 00

SUB CODE: IE

NO REF Sov: 000

OTHER: 000

Card 1/1

100-11700 V 15

2108 Bogatov, V. K. and Semyachkin, ...

S. Ye. Tovary Shchi Rokogo Potrebleniya IZ Metallootkhodov. IZD. 2-ye,
Ispr. I Dop. M., Koiz, 1954. 124 s.s. Ill. 22 sm. 3.000 EDZ. 2 R. 70 K.-
(54-56829) 1-Ye IZD. Vyshchlo Pod Zagl: Izdeliya Shchirokogo Potre-
Bleni Ya Iz Metallootkhodov. 672.96-683

BOGATOV, V. N.

BOGATOV, V. N.: "Temperature and light conditions for the growing of eggplant in Leningrad Oblast." All-Union Order of Lenin Academy of Agricultural Sciences imeni V. I. Lenin. All-Union Inst of Plant Growing. Leningrad, 1956. (Dissertation for the Degree of Candidate in Biological Science.)

Knizhnaya letopis', No. 30, 1956. Moscow.

BOGATOV, V.M.

Influence of lowered temperatures on the growth and development of
eggplants. Izv. AN Turk. SSR no.2:85-88 '58. (MIRA 11:4)

1.Turkmenskaya syantsiya Vsesoyuznogo nauchno-issledovatel'skogo
instituta rasteniyevodstva.
(Eggplant)

BOGATOV, V.M.

Effect of low temperatures on the eggplant. Fiziol. rast. 5 no.4:
356-358 Jl-Ag '58. (MIRA 11:8)
(Eggplant) (Plants, Effect of temperature on)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3

MITIN, V.F., kand.tekhn.nauk; ROGATOV, Ye.A., inzh.; KONDRAZHOV, A.S., inzh.

MZD-1 machine for laying drain pipes. Stroj. i dor. mash. 10 no.7:8
Jl '65.
(MIRA 18:8)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3"

BOGATOV, Ye.A., inzh.; KONDRASHOV, A.S., inzh.

MZD-1 machine for the laying of tile drainage pipes. Gidr. i
mel. 17 no.11:36-39 N '65. (MIRA 18:11)

1. Kalininskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta torfyanoy promyshlennosti.

BOGATOVA, A.V.

Ascarid under the conjunctiva. Vest, oft. 70 no.3:49 My-Je '57.
(MLRA 10:8)
1. Otdelencheskaya zheleznodorozhnaya bol'nitsa stantsii Kavkazskaya,
Sever-Kavkazskoy zheleznoy dorogi
(EYE--FOREIGN BODIES)
(ASCARIDS AND ASCARIASIS)

BOGATOVA Galina Petrovna

BOGATOVA, Galina Petrovna; FOMINA, Ye.N., red.; KHELEMSKAYA, L.M., tekhn.red.

[Searches and discoveries; books about geographers and explorers]
Poiski i otkryтия; knigi o geografeakh i puteshestvennikakh. Moskva,
M-vo kul'tury RSFSR, 1957. 13 p. (Besedy o novykh nauchno-popular-
nykh knigakh, no.3)

(Bibliography--Discoveries (in geography))

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3

Bogatova, G.P.

BOGATOVA, Galina Petrovna; KOZYREV, V.N., red.; KHNIEMSKAYA, L.M., tekhn.red.

[Countries of the world; a bibliography] Strany mira; rekomendatel'-nyi ukazatel' literatury. Moskva, Gos.biblioteka SSSR im. V.I. Lenina, 1957. 130 p.
(Bibliography--Geography) (MIRA 11:3)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3"

~~BOGATOVA, Galina Petrovna; POMINA, Ye.N., red.; VASIL'YEVA, L.P.,
tekhn.red.~~

[Treasures of the earth crust] Sokrovishcha zemnykh nedr.
Moskva, M-vo kul'tury RSFSR, Gos.ordena Lenina biblioteka
SSSR im. V.I.Lenina, 1959. 22 p. (Besedy o nauchno-popular-
nykh knigakh, no.?) (MIRA 12:11)
(Bibliography--Mines and mineral resources)

BOGATOVA, Galina Petrovna; NASEDKINA, V.A., red.; ZHURAVLEV, A.S.,
tekhn.red.

[Explorations in the Arctic and the Antarctic] Issledovaniia
v Arktike i Antarktike. Moskva, M-vo kul'tury RSFSR, Gos.ordena
Lenina biblioteka SSSR im. V.I.Lenina, 1960. 26 p. (Besedy o
nauchno-popularnykh knigakh, no.8). (MIRA 13:11)
(Bibliography--Arctic regions)
(Bibliography--Antarctic regions)

BOGATOVA, Galina Petrovna; FOMINA, Ye.N., red.; VASIL'YEVA, L.P.,
tekhn. red.

[The earth in its past and present; index of scientific and
popular literature] Zemlia v ee proshlom i nastoiashchem;
ukazatel' nauchno-populiarnoi literatury. Izd.3., dop. i
perer. Moskva, Gos. biblioteka SSSR im. V.I.Lenina, 1961.
46 p.

(MIRA 15:2)

(Bibliography—Earth)

NASEDKINA, Vera Aleksandrovna; PLAVIL'SHCHIKOV, N.N., prof.,
nauchnyy red.; BOGATOVA, G.P., red.; KHOVANSKIY, I.P., tekhn.
red.

[Living nature; an index of scientific and popular literature]
Zhivaia priroda; ukazatel' nauchno-populiarnoi literatury. Na-
uchnaia red. N.N. Plavil'shchikova. Izd.3., dop. i perer. Mo-
skva, Gos. biblioteka SSSR, im. V.I.Lenina, 1962. 115 p.

(MIRA 15:5)

(Bibliography—Natural history)

BOGATOVA, G.P.; DROBININ, O.I.; CHEREMISINOVA, I.P.; NADEZHINA, G.A., red.; FADEYEVA, Ye.I., red.

[Books on the chemization of the national economy; lists recommended for district and rural libraries] Knigi po khimizatsii narodnogo khoziaistva; rekomendatel'nye spiski dlja raionnykh i sel'skikh bibliotek. Moskva, Izd-vo "Kniga," 1964. 23 p. (MIRA 18:1)

1. Moscow. Publichnaya biblioteka.

BOGATOVA, I.B.

Role of *Apus cancriformis* Schaffer as a pest on sturgeon rear-
ing fish farms, Vop. ikht. no.12:165-176 '59.
(MIRA 13:4)

1. Velikolukskoye otdeleniye Vsesoyuznogo nauchno-issledovatel'-
skogo instituta ozernogo i rechnogo rybnogo khozyaystva -
VNIOZKh.
(Sturgeons--Diseases and pests) (Branchiopoda)

BOGATOVA, I.B.

Food of young pond-reared salmon (*Salmo salar L.*) during early stages of development. Vop. ikht. 2 no.1:169-173 '62. (MIRA 15:3)

1. Pskovskoye otdeleniye Gosudarstvennogo nauchno-issledovatel'skogo instituta ozernogo i rechnogo rybnogo khozyaystva (GosNIORKh), Velikiye Luki.

(VYG VALLEY--SALMON) (FISH CULTURE) (FISHES--FOOD)

BOGATOVA, I.B.

Lethal limits of oxygen content, temperature and pH for some
representatives of the family Chydoridae. Zool.zhur. 41
no.1:58-62 Ja '62. (MIRA 15:4)

1. Pskov Branch of the State Research Institute of the Lake and
River Fishery Management. (Chydorus)

BOGATOVA, I.B.

Food relations of lake fishes. Vop. ikht. 3 no.2:336-346 '63.
(MIRA 16:7)

1. Vserossiyskiy nauchno-issledovatel'skiy institut prudovogo
rybnogo khozyaystva (VNIPRKh), Moskva,
(Bol'shoy Ivan, Lake--Fishes--Food)

I-A BOGATcVA

24(8)

PHASE I BOOK EXPLOITATION 507/2117

Sovremennaya tekhnika i metody issledovaniy po eksperimental'noy tekhnike i metodam vysokotemper-

peraturnikh i maya tekhnika i metody issledovaniy pri vysokikh temperaturakh. Tekhnicheskaya i eksperimental'naya tekhnika i metody issledovaniy pri vysokikh temperaturakh. Transactions of the Conference on Experimental Techniques and Methods of Investigation at High Temperatures. Conference on Experimental Techniques and Methods of Investigation at High Temperatures (Moscow, AN SSSR, 1959). 709 p. (Series: Khimicheskaya promst., Tsvetnaya metallovedeniya, Komissiya po fiziko-khimicheskim issledovaniyam proizvodstva metallurgii) 2,200 copies printed.

Basp. Ed.: A. M. Samarin. Corresponding Member, USSR Academy of Sciences; Ed. of Publishing House: A. I. Bunkovter.

PURPOSE: This book is intended for metallurgists and metallurgical engineers.

CONTENTS: This collection of scientific papers is divided into six parts: 1) thermodynamic activity and kinetics of high-temperature processes; 2) constitution diagrams and studies of liquid metals and alloys; 3) physical properties of pure metals; 4) new analytical methods and procedures; 5) property, and 6) general questions. For more specific coverage, see Table of Contents.

Experimental Techniques and Methods (Cont.)

507/2117

Zvezdinovich, D.P., T.P. Frantsevich-Zabudovskaya, A.I. Zaytsev,

A.P. Borodtova, N.Ye. Melikyan, and A.F. Vas'ko. Electro-

tungsten Alloy. 505

In the electrolytic precipitation of nickel-molybdenum and

nickel-tungsten alloys from ammonical solutions, an increase in the concentration of molybdenum and tungsten at a given concentration of nickel leads to (1) an increase in their relative content in the alloy, provided the experiments are carried out at temperatures of up to 300°C and (2) a drop in the output of current. In both types of alloys an increase in nitrate concentration results in an increase in current. A rise in temperature leads to an increase in the current output, especially in the case of tungsten-nickel alloys. With a change in current density the current output passes through a maximum in both types of alloys. A rise in temperature affects the composition of the two types of alloys differently: the relative amount of tungsten in the alloy increases sharply, while that of molybdenum is hardly affected. An increase in current density nearly always leads to a drop in molybdenum content, but does not affect the composition of the tungsten alloy. The electrolyte composition required for producing alloys with identical amounts of molybdenum and tungsten are very different. As regards the relative concentrations of the principal components, there may be due to the difference in the coefficients of diffusion of molybdenum and tungsten-ferrous ions. Determining the transfer of the ions to the cathode. Experiments conducted in large-scale installations confirm the belief that the proposed method is satisfactory for industrial application. An advantage of the suggested type of electrolyses (ammoniacal solu-

tions) is their practically unlimited service life and their cheapness as compared with oxygenated electrolytes. The alloys thus produced are of satisfactory purity as regards metallic impurities (not more than 0.01 percent), but they contain a considerable amount of nonmetallic impurities, especially oxygen and nitrogen, because of the type of electrolytes used and the electrochemical process.

Further study will be required to solve this problem.

Card 20/ 32

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3

MATISHEV, V.A.; BOGATOVA, L.S.

Complex formation of paraffin hydrocarbons of normal structure
with carbamide. Trudy MINKHIGP no.44:275-277 '63.

(MIRA 18:5)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3"

Bogatova, M.G.

USSR/Farm Animals - General Problems.

Q-1

Abs Jour : Ref Zhur - Biol., No 7, 1958, 30891

Author : Bogatova M.G.

Inst :

Title : Feed Value of the Sunflower.
(Kormovyye dostoинstva podsolnchnika).

Craig Pub : Dokl. VASKhNIL, 1957, No 6, 18-21

Abstract : The sunflower harvested for silage at the stage of a bulbous mass, i.e. at the beginning of florescence, is rich in nutritive substances and vitamins. According to the author's data, the sunflower "Gigant 549" contains 6.16% of sugar, 8.9% of raw protein, 15.75% of cellulose, 28.14 mg.% of vitamin C, and 2.79 mg.% of carotene.

Card 1/1

BOGATOVA, M. G., Candidate of Biol Sci (diss) -- "The study, choice, and evaluation of the starting material for selection of fodder sunflower in the north-western zone of the USSR". Leningrad, 1959. 17 pp (All-Union Order of Lenin Acad Agric Sci im V. I. Lenin, All-Union Inst of plant Growing), 150 copies (KL, No 21, 1959, 113)

NIKOL'SKIY, B.P.; PARAMONOVА, V.I., BOGATOVA, N.F.

Theory of anion exchange. Part 2. Nature of anion exchange on Mn -phenylenediamine resin. Uch.zap.Len.un. 163:121-145 '53.
(MLRA 9:6)

(Anions) (Phenylenediamine) (Ion exchange)

BOGATOVA, N.F.

ZOSIMOVICH, D.P.; BOGATOVA, N.F.

Use of soluble nickel-molybdenum and nickel anodes for the formation of nickel-molybdenum alloys from alkaline electrolytes.
Zhur.prikl. khim. 31 no.3:429-434 Mr '58. (MIRA 11:4)

1.Institut obshchey i neorganicheskoy khimii AN Ukrainskoy SSR.
(Nickel-molybdenum alloys) (Electroplating)

5(4)

AUTHORS: Zosimovich, D. P., Bogatova, N. F.

SOV/76-35-6-24/44

TITLE: Electrolytic Separation of Zinc in the Presence of Small Quantities of Antimony and Cobalt (Elektroliticheskoye vydeleniye tsinka v prisutstvii malykh kolichestv sur'my i kobal'ta)

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 6, pp 1324-1327 (USSR)

ABSTRACT: The quantity of electrolytically separated zinc and that of the hydrogen developed at the cathode in the process depends among other things on the impurities in the electrolyte. An investigation is made here of the simultaneous influence of antimony and cobalt in the electrolytic separation of zinc by the method of plotting polarization curves (PC) on zinc electrodes in a standard electrolyte (60 g/l Zn and 100 g/l H₂SO₄) with antimony (0.05, 0.1, 0.2, 1.0 and 5.0 mg/l) and cobalt additions (20 mg/l). The polarization curves obtained reveal (Figs 1, 2), that an addition of only 0.05 mg/l Sb shifts the (PC) to more negative values, while an increase in the Sb addition causes the (PC) to shift to more electro-positive values, i.e. with a rise in the Sb concentration in

Card 1/2

Electrolytic Separation of Zinc in the Presence of Small Quantities of
Antimony and Cobalt

SOV/76-33-6-24/44

the electrolyte the hydrogen separation increases and that of Zn drops. The Co additions likewise effect a shift of the Zn-separation potential to more negative values (Fig 3). With the simultaneous addition of Co⁺⁺ and Sb⁺⁺-cations the separation process is determined by Sb. It is assumed that the ions of Sb and Co act as surface active substances in the electrolytic Zn separation. Additions of Sb as potassium stibium tartrate or antimony sulfate have the same effect on the (PC). There are 3 figures and 10 Soviet references.

ASSOCIATION: Akademiya nauk USSR, Institut obshchey i neorganicheskoy khimii
(Academy of Sciences of the UkrSSR, Institute of General
and Inorganic Chemistry)

SUBMITTED: November 22, 1957

Card 2/2

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3

NIKOL'SKIY, B.P.; BOGATOVA, N.F.

Certain problems in the theory of ion exchange. Part 2:
Nonexchange absorption of electrolytes by ion exchangers.
Vest LGU 16 no.16:97-107 '61. (MIRA 14:8)

(Ion exchange resins)
(Electrolytes)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3"

NIKOL'SKIY, B.P.; BOGATOVA, N.F.

Sorption of water vapors by sulfonic acid and carboxylic cation exchangers. Dokl. AN SSSR 141 no.6:1409-1412 D '61.

(MIRA 14:12)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova.
2. Chlen-korrespondent AN SSSR (for Nikol'skiy).
(Water vapor) (Sorption) (Ion exchange)

NIKOLSKI, B.P. [Nikol'skiy, B.P.]; BOGATOVA, N.F.

Some problems of the theory of ion exchange. I. Curves of ion absorption by cationites and anionites. II. Electrolyte absorption by ionites without exchange. Analele chimie 17 no.2:104-134 Ap-Je '62.

Bogatova, S. K.

USSR/Chemical Technology. Chemical Products and Their Application -- Crude rubber, natural and synthetic. Vulcanized rubber, I-21

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6021

Author: Orlovskiy, P. N., Lukomskaya, A. I., Bogatova, S. K.

Institution: None

Title: Concerning Methods for the Evaluation of Technological Properties of Carbon Black Rubber Mixes

Original Publication: Khim. prom-st', 1956, No 4, 217-224

Abstract: Comparison of elastic recovery indices (E) determined by means of compression plastometers of Williams and Defo type, Muni type shear plastometer, and extrusion plastometer operating at a given rate of deformation, with the shrinkage values (S) of three-component mixtures of SKB rubber, stearin and carbon black, containing varying amounts of channel, furnace and lamp carbon black, after calendering or extrusion in a worm-gear press. Shear and extrusion plastometers, which provide testing conditions that are analogous to the

Card 1/3

USSR/Chemical Technology. Chemical Products and Their Application -- Crude rubber, natural and synthetic. Vulcanized rubber, I-21

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6021

Abstract: conditions of processing of the mixtures in industrial equipment, correlate E and S. The Defo type plastometer gives a very approximate evaluation of S on the basis of the index E/P_D , wherein P_D is Defo hardness. Williams type plastometer is not suitable for an evaluation of S. A method has been worked out for the determination of the roughness coefficient C, in order to evaluate the condition of the surface of a calendered sheet of the mixture: $C = \pi abt / 4v_0$, where a, b and t are, respectively: minor axis, major axis and thickness of an ellipse obtained after relaxation (shrinkage) of a circular sample cut on the middle roller of a three-roller calender, v_0 being the actual volume of the sample. The shear plastometer makes it possible to evaluate C on the basis of an empirical equation of the type:

$$1/C\% = A/R_k\% + (1 - A)/I\%$$

wherein $R_k\%$ is the ratio in percent of the E of the filled mixture, recomputed for the content of the rubber phase in the mixture, to the E of the unfilled mixture; $I\%$ is the ratio in percent of the drop

Card 2/3

USSR/Chemical Technology. Chemical Products and Their Application -- Crude rubber, natural and synthetic. Vulcanized rubber, I-21

Abst Jurnal: Referat Zhur - Khimiya, No 2, 1957, 6021

Abstract: in viscosity I of the filled mixture to that of the unfilled mixture; C% is the ratio in percent of the roughness coefficient C of the filled mixture, to that of the unfilled mixture; and A = 0.5. Drop in viscosity $I = (V' - V'')/V''$, where V' and V'' , respectively, are viscosity values according to Many, determined immediately after the beginning of the test, and during the 3rd minute. In an analogous manner an evaluation of C is made on the basis of data secured by means of the extrusion plastometer (according to drop in pressure and shrinkage in the apparatus), at two different rates of extrusion.

Card 3/3

S/138/60/000/007/006/010
A051/A029

AUTHORS: Orlovskiy, P.N.; Lukomskaya, A.I.; Tsydzik, M.A.; Bogatova, S.K.

TITLE: An Evaluation of the Technological Properties of Carbon Black Rubber
Mixtures on a Shifting Plastomer

PERIODICAL: Kauchuk i Rezina, 1960, No. 7, pp. 21 - 28

TEXT: The relationship between the technological properties of rubber mixtures (the shrinkage after the calender or the caterpillar press and the roughness coefficient) and the indices obtained on the shifting Mooney-type plastomer was determined. Methods for determining the tendency of the various mixtures to scorching were compared. The following mixtures were investigated: 1) three-component mixtures on a CH5 (SKB) rubber base, commercial stearin and Soviet carbon blacks (anthracene, jet and thermal), 2) three-component mixtures on a CKC-30A (SKS-30A) rubber base, commercial stearin and Soviet carbon blacks (gaseous channel and oven carbon blacks), 3) four-component mixtures on the above-mentioned rubber bases with combinations of various types of carbon black, 4) multi-component carbon black rubber mixtures based on tire mixture compositions. Table 1

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S/138/60/000/007/006/010
A051/A029

An Evaluation of the Technological Properties of Carbon Black Rubber Mixtures on
a Shifting Plastomer

is a list of the characteristics of the applied carbon blacks. The authors refer to a previous article (Ref. 1), where they outlined the methods used for the technological evaluation of the rubber mixtures under industrial conditions. The shrinkage of the rubber mixture after calendering or passing under the worm press is caused by the elastic restoration after deformation and can be determined from the changes in the initial dimensions of the mixtures in various directions. The shrinkage is a function of the direction as well as of the initial dimensions of the samples. Formulae are submitted for the calculation of the shrinkage and for the calculation of the initial thickness of the sample, t_0 , and the length of the sample L. It is pointed out that the shrinkage of the mixtures varies due to the heterogeneity of the material and due to the heterogeneous state of tension, not only in various directions, but also at different parts of the material. That is why the surface of the material may be rough after shrinkage or may even change its shape. This complicates the measuring of the samples and the estimation of the shrinkage. However, the distortion of the shape enables one to judge the degree of the roughness. The roughness coefficient is taken to be $C = V/V_0$. The

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S/138/60/000/007/006/010
A051/A029

An Evaluation of the Technological Properties of Carbon Black Rubber Mixtures on a Shifting Plastomer

greater is its difference from unit, the rougher is the surface of the sample. The maximum thickness of the sample can also be measured without taking into consideration the change in the shape according to Figure 1. Formula 4 represents the relative roughness coefficient, which can be calculated from data obtained on the shifting plastomer (Ref. 1). The smoothness of the material 1/C would depend on the homogeneity and the ability of the material to retain its shape. The ratio R/v_0^2 was taken to be the laboratory index of the elastic restoration to the viscosity according to Mooney. The viscosity data point to the expenditure of the power used. This is one of the factors which characterizes the shrinkage of the mixtures in the equipment. A quantitative coordination of the technological and laboratory indices was observed for the three-component carbon black rubber mixtures if the indices were expressed in relative units, i.e., in %, to the corresponding indices of non-filled mixtures. In this case the relative roughness coefficient could be determined, characterizing the quality of the processed mixture's surface, on the shifting plastomer (according to the relative drop in the viscosity and the relative elastic reformation). There are 3 tables, 7 graphs, 1 diagram, 11 refer-

Card 3/4

S/138/60/000/007/006/010
A051/A029

An Evaluation of the Technological Properties of Carbon Black Rubber Mixtures on
a Shifting Plastomer

ences: 4 Soviet and 7 English.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Scienc-
tific Research Institute of the Tire Industry)

Card 4/4

KOROVKIN, Vladimir Dmitriyevich; BOGATOVA, V., red.; PODSHEBYAKIN, I.,
tekhn. red.

[Technical handling of film copies] Tekhnicheskaja ekspluata-
tsiya fil'mokopii. Moskva, Iskusstvo, 1962. 127 p.

(MIRA 15:8)

(Motion pictures—Distribution)
(Motion-picture photography—Films)

UKHIN, Pavel Nikolayevich; BOGATOVA, V., red.; PODSHEBYAKIN, I.,
takhn. red.

[Safety measures in motion-picture enterprises]Tekhnika bez-
opasnosti na kinopredpriatiakh. Moskva, Izd-vo "Iskusstvo"
1962. 317 p. (MIRA 15:10)
(Industrial hygiene) (Fire prevention)
(Motion-picture industry—Safety measures)

YASHUNSKAYA, Felitsiya Iosifovna, kand. tekhn. nauk; FEYGIN, Il'ya
Yefimovich, inzh.; BOGATOVA, V.N., red.; YURCHENKO, D.I., red.-
leksikograf; AKSEL'ROD, I.Sh., tekhn. red.

English-Russian caoutchouc, rubber and chemical fibres
dictionary, Anglo-russkii slovar' po kauchuku, rezine i khi-
micheskim voloknam. English-Russian caoutchouc, rubber and
chemical fibres dictionary. Izd.3., perer. i dop. Moskva, Fiz-
matgiz, 1962. 260 p. (MIRA 16:6)

(Rubber--Dictionaries)
(Textile fibers, Synthetic--Dictionaries)
(English language--Dictionaries--Russian)

KATYSHEV, Yu.V.; NOVIKOV, D.L.; POLFEROV, E.A.; DMITRIYEVSKIY,
V.P., prof., doktor fiz.-mat. nauk; red.; KHASNOBRODSKAYA,
L.L., red.; BOGATOVA, V.N., red.-leksikograf

[English-Russian dictionary on charged particle accelerators]
Anglo-russkii slovar' po uskoriteliam zariazhennykh chas-
tits. Moskva, Sovetskaisa entsiklopediya, 1965. 323 p.
(MIRA 18:10)

IL'IN, Roman Nikolayevich; IOFIS, Ye.A., kand.tekhn.nauk, red.; BOGATOVA,
V.S., red.; GORINA, V.A., tekhn.red.

[Photography with natural light] Fotografirovaniye pri estestvennom
osveshchenii. Pod red. E.A.Iofisa. Moskva, Gos.izd-vo "Iskusstvo,"
1960. 71 p. illus. (Biblioteka fotoliubitelia, no.19)

(Photography—Lighting)

(MIRA 14:6)

PIATNITSKIY, Fedor Sergeyevich; IOFIS, Ye.A., kand.tekhn.nauk, red.;
BOGATOVA, Y.S., red.; MALEK, Z.N., tekhn.red.

[Determining exposure time in picture taking and printing]
Opredelenie ekspozitsii pri s"emke i pechati. Pod red. E.A.
Iofisa. Moskva, Gos.izd-vo "Iskusstvo," 1960. 93 p. (Biblio-
teka fotoliubitelia, no.20).

(MIRA 13:11)

(Photography--Exposure)

ZELIKMAN, Vitaliy L'vovich; LEVI, Sergey Maksimovich; KIRILLOV, N.I.,
prof., doktor tekhn.nauk, red.; BOGATOVA, V.S., red.;
CHICHERIN, A.N., tekhn.red.

[Fundamentals of the synthesis and application of photographic
emulsions] Osnovy sinteza i poliva fotograficheskikh emul'sii.
Moskva, Gos.izd-vo "Izdatvo," 1960. 355 p.

(MIRA 14:3)

(Photographic emulsions)

BORISENKO, Ivan Vasil'yevich; BOGATOVA, V.S., red.; PODSHYABYAKIN, I.N.,
tekhn. red.

[Safety engineering in motion-picture theaters and film supply
points] Tekhnika bezopasnosti na kinoustanovkakh i fil'mobazakh.
Izd.3., ispr. i dop. Moskva, Gos. izd-vo "Iskusstvo," 1961.
(MIRA 14:8)

(Motion-picture theaters—Fires and fire prevention)
(Industrial accidents)

BOGATOVA, V.S., red.; SHILINA, Ye.I., tekhn. red.

[Time, forward! the Second All-Union Photographic Exhibition "Seven-year plan in action"] Vremia, vpered! Time forward!
Temps, en avant! tiempo, adelante!.. -; Vtoraia Vsesoiuznaia
khudozhestvennaiia fotovystavka "Semiletka v deistvii." Moskva,
Iskusstvo, 1963. 19 p.
(Photography—Exhibitions)

(MIRA 16:10)

LIKACHEV, Vladimir Andreyevich; BOGATOVA, V.S., red.; PANKRATOVA,
M.A., tekhn. red.

[Use of pyrotechnics in motion pictures] Pirotekhnika v kino.
Izd.2., ispr. i dop. Moskva, Iskusstvo, 1963. 148 p.
(MIRA 16:12)

(Motion pictures—Special effects)

ZAKURDAYEV, Leonid Vasil'yevich; BOGATOVA, V.S., red.

[Motion-picture films, their characteristics and processing] Kinoplenki, ikh kharakteristiki i obrabotka. Moscow, Izd-vo "Iskusstvo," 1964. 109 p. (MIRA 17:7)

KARIPIDI, Sokrat Dmitriyevich; BOGATOVA, V.S., red.

[Control of the quality of motion-picture projection]
Kontrol' kachestva kinopokaza. Izd.2., ispr. i dop.
Moskva, Iskusstvo, 1964. 170 p. (MIRA 18:3)

KARTUZHANSKIY, Aleksandr L'vovich; IOFIS, Ye.A., kand. tekhn.
nauk, red.; BOGATOVA, V.S., red.

[Physical foundation of the photographic processes on
silver halide salts] Fizicheskie osnovy fotografiche-
skogo protsessa na galogenidoserebrianykh soliakh. Mo-
skva, Iskusstvo, 1965. 84 p. (MIRA 18:5)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3

SOKOLOV, Sergey Aleksandrovich; MUN'KIN, Veniamin Borisovich;
BOGATOVA, V.S., red.

[Equipment and systems for the remote control of lighting
by operator stations] Apparaty i sistemy telemekhaniziro-
vannogo upravleniya operatorskim osveshcheniem. Moskva,
Iskusstvo, 1965. 234 p. (MIRA 18:7)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3"

PODKUYKO, Sergey Il'ich; KACHURIN, Il'ya Konstantinovich;
DOKATQVA, V.S. red.

[Repair of the electrical equipment and electroacoustical
apparatus of motion-picture projection systems] Remont elektro-
oborudovaniia i elektroakusticheskoi apparatury kinoustanovok.
Moskva, Iskusstvo, 1965. 265 p. (MIRA 18:12)

BOGATOVA, Y.E.I.

Chto chitat' rybakam Khabarovskogo kraia o svoem proizvodstva [What to read to the
fishermen of Khabarovsk Territory about their industry]. Khabarovsk, Izd.
Khabarovskoi krae voi biblioteki, 1952. 31 p.

SO: Monthly List of Russian Accessions, Vol. 6, No. 2, May 1953

BERGMAN, A.G.; BOGATOVA, Ye.I.

System consisting of lithium and sodium pyrophosphates and molybdates. Zhur. neorg. khim. 9 no.9:2182-2188 S '64.

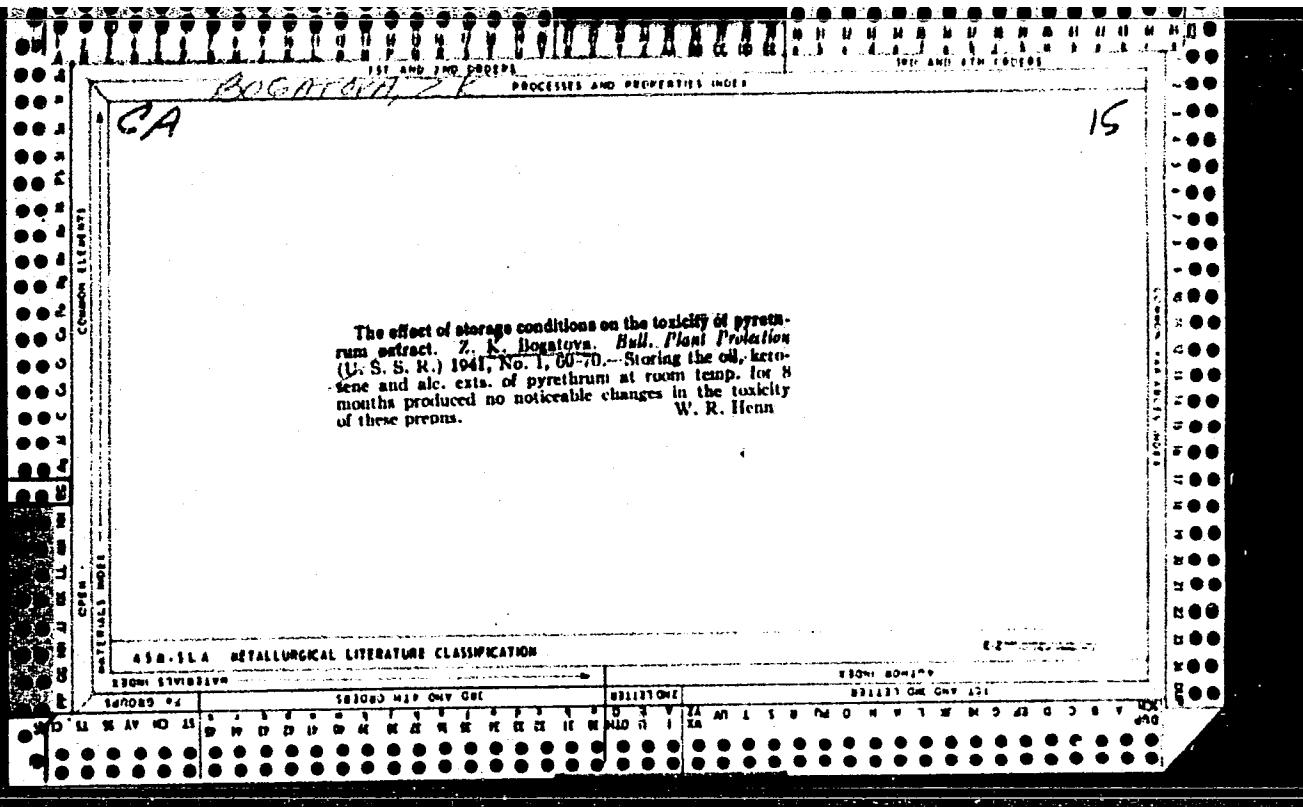
System consisting of lithium and sodium pyrophosphates and molybdates. Ibid.:2189-2195

(MIRA 17:11)

1. Rostovskiy-na-Donu institut sel'skokhozyaystvennogo mashinostroyeniya i Krasnodarskiy filial Vsesoyuznogo zaochnogo inzhenerno-stroitel'nogo instituta (VZISI).

BOGATOVA, Ye.I.; KISLOVA, A.I.; BERGMAN, A.G.

Reciprocal system consisting of lithium and potassium pyro-phosphates and molybdates. Zhur. neorg. khim. 9 no.11:
2623-2630 N '64 (MIRA 18:1)



L 39505-46

ACC NR: AF6011180

integrator stages just preceding the potentiometer stage, the first for the main signal and the second for the main+auxiliary signal. The measurement is analyzed in terms of equivalent circuit and component parameters and in terms of accuracy. The high statistical inaccuracy as compared to the absolute gaging method is a disadvantage here. Orig. art. has: 3 figures and 5 formulas. [JPRS]

SUB CODE: 18, 09, 13 / SUBM DATE: none

Card 2/2 M6P

BOGATSKAYA, L.N. [Bchats'ka, L.N.]; EPSHTEYN, M.M.

Effect of α -pinene on chemoreceptor function of peripheral vessels.
Fiziol. zhur. [Ukr.] 5 no.5:659-662 J-0 '59 (MIRA 13:3)

1. Kiyevskiy meditsinskiy institut im. akad. A.A. Bogomol'tsa.
(PINENE) (BLOOD VESSELS--INNERVATION)

BOGATSKAYA, L.N., dotsent; LYGINA, T.I., starshiy nauchnyy sotrudnik

Pharmacological characteristics of galascorbin. Vrach.delo
no.2:203 P '60. (MIRA 13:6)

1. Kafedra biokhimii (sav. - prof. Ye.P. Shamray) Kiyevskogo
meditsinskogo instituta,
(ASCORBIC ACID)

BOGATSKAYA, L.N.

Age-related characteristics of respiratory processes and glycolysis
in the myocardium. Biul. eksp. biol. i med. 57 no.1:16-19 Ja '64.
(MIRA 17:10)

1. Kafedra biokhimii (zav. - prof. Ye.F. Shamray) Kiyevskogo ordena
Trudovogo Krasnogo Znameni meditsinskogo instituta imeni Bogomol'tsa
i laboratotii fiziologii (zav. - doktor med. nauk V.V. Frol'kis)
Instituta gerontologii AMN SSSR, Predstavlena deystvitel'nym chlenom
AMN SSSR A.TS. Cherkes.

FROL'KIS, V.V.; BOGATSKAYA, L.N.

Age-related characteristics of the regulation of energy metabolism
processes in the heart. Vop. geron. i geriat. 4:104-117 '65.

(MIRA 18:5)

1. Institut gerontologii AMN SSSR i Kiyevskiy meditsinskiy institut.

BOGATSKAYA, L.N.; VERZHIKOVSKAYA, N.V.

Comparative characteristics of the intensity of tissue respiration
of the myocardium and liver in white rats of various age periods.
Vop. geron. i geriat. 4:121-125 '65. (MIRA 18:5)

1. Meditsinskiy institut, Kiyev i Institut gerontologii AMN SSSR,
Kiyev.

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3

KHUTORANSKIY, M.D. (Chelyabinsk); BOGATSKAYA, T.V. (Chelyabinsk)

Health Day in winter. Zdorov'e 9 no.3:20 Mr '63.

(CHELYABINSK--PUBLIC HEALTH)

(MIRA 16:5)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3"

BOGATSKIY, V.V.; SMIRNOV, V.I., red.; FEDOROVA, L.N., red. izd-va;
BYKOVA, V.V., tekhn. red.

[Mathematical analysis of test area] Matematicheskii analiz
razvedochnoi seti. Moskva, Gosgeoltekhizdat, 1963. 211 p.
(MIRA 16:7)
(Prospecting)

Bogatskaya, Ye.D.

USSR/Organic Chemistry. Synthetic Organic Chemistry. E-2

Abs Jour : Ref Zhur - Khimiya, No. 8, 1957, 26708

Author : Plizov, A.K.; Kostyuk, A.P.;
Bogatskaya, Ye.D.

Inst : Odessa University.
Title : To The Question of Synthesis of Angelic
and Tiglinic Acids and Their Esters.

Orig Pub : Tr. Odessk. un-ta, 1956, 146, Ser. khim. n.,
No. 5, 27 - 31.

Abstract : Tiglinic acid (I) was synthetized by dehydra-
tion of α -methyl- β -oxybutyric acid (II).
Angelic acid (III) mixed with I was obtained
by dehydration of methylethyl- α -oxyacetic
acid (IV). 50 mlit of $\text{CH}_3\text{COCHCH}_3\text{COOC}_2\text{H}_5$ is
dissolved in a mixture of 150 mlit of water
with alcohol and acidifying with 10% solution

Card 1/3

USSR/Organic Chemistry. Synthetic Organic Chemistry. E-2

Abs Jour : Ref Zhur - Khimiya, No. 8, 1957, 26708.

produces III with the boiling temperature of 88 - 90°/12 mm, melting point of 45 - 46°, $n_D = 1.4430$. III is heated with KHCO_3 and $\text{C}_2\text{H}_5\text{I}$ at 70 - 75° collecting the reaction water; the yield of the ethyl ester of III is 89.6%, its boiling point is 140 to 142°, $n_D = 1.4280$. Ethyl ester, boiling point 152 to 154°, $n_D = 1.4339$, was prepared by esterification of I in C_6H_6 solution (apparatus of Soxhlet).

Card 3/3

BOGATSKAYA, Z.D.

USSR/ Analytical Chemistry. Analysis of Organic Substances. G-3

Abs Jour: Referat. Zhur.-Khimiya, No. 8, 1957, 27243.

Author : V.D. Bogatskiy, Z.D. Bogatskaya, A.V. Mozharovskaya.

Inst : Odessa University.

Title : Qualitative Determination of Small Amounts of Benzene.

Orig Pub: Tr. Odessk. un-ta, 1956, 146, ser. khim. n., No. 5, 107 - 109.

Abstract: A method of determination of benzene (I) (0.1 to 0.001 g) based on 3 reactions was developed. These reactions are: the condensation reaction of I with phthalic anhydride (II) in presence of water free AlCl₃, the reaction of conversion of

Card 1/2

USSR/ Analytical Chemistry. Analysis of Organic Substances.

G-3

Abs Jour: Referat. Zhur.-Khimiya, No. 8, 1957, 27243.

forming o-benzoylbenzoic acid into anthraquinone, and the oxanthrol color reaction of anthraquinone. I, II and water free AlCl₃ are carefully mixed in a test tube, the reaction mixture is kept $\frac{1}{2}$ an hour at room temperature, cooled, H₂O is added and the mixture is treated with steam until the smell of I disappears, after which it is treated with soda solution and again with steam; Al(OH)₃ is filtered off. The filtrate is acidified with hydrochloric acid, evaporated in a crucible, and 1 to 3 drops of H₂SO₄ (sp. gr. 1.84) are added to the residue, the mixture is heated 15 to 20 min. at 150°; 1 ml of water, 2 drops of alkali and Zn dust are added, while the mixture is cooling. If heated to the boiling point, red coloration of a thrahydorquinone will appear.

Card 2/2

PLISOV, A.K., BOGATSKIY, A.V.; BYKOVETS, A.I.; BOGATSKAYA, Z.D.

Synthesis of new sulfamide compounds. Trudy OTIPiKhP 9 no.2:97-100
'59. (MIRA 13:9)

(Sulfamide)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3

BOGATSKAYA, Z.D.; GARKOVIK, N.L.

Synthesis of α -propylacrylic acid and its esters. Ukr.khim.
zimur. 27 no.5:671-673 '61. (MIRA 14:9)

1. Odesskiy gosudarstvennyy universitet im. Mechnikova,
kafedra organicheskoy khimii.
(Acrylic acid)

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3"

BOGATSKAYA, Z.D.; OSIPCHUK, V.P.; DI FU-BAO [Ti Fu-pao]; GOL'MOV, V.P.
[deceased]

Synthesis of 1,2'-dibromo-2-methylpentane and 1,2'-dibromo-2,3-dimethylbutane. Zhur.ob.khim. 32 no.7:2282-2283 Jl '62.

(MIRA 15:7)

1. Odesskiy gosudarstvennyy universitet imeni I.I.Mechnikova.
(Pentane) (Butane) (Bromides)

BOGATSKAYA, Z.D.

Synthesis of disubstituted malonic esters with a β -phenoxyethyl group. Nauch. zh. zhegod. Khim. fak. Od. un. no. 2391-94 '63.
(MIRA 17:8)

BOGATSKAYA, Z.D.; DI FU-BAO [Ti Fu-pao]; IVASHCHENKO, V.Ye.; GALATIN, A.F.

Interaction of 1-bromo-2-bromomethyloctane with sodium malonic ester.
Zhur. ob. khim. 34 no.10:3204-3205 O '64.

1. Odesskiy gosudarstvennyy universitet im. Mechnikova.
(MIRA 17:11)

"APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3

BOGATSKIY, A. V.

"Synthesis and Properties of the Stereoisomers of Crotonic Acids and Their Esters."
Cand Chem Sci, Odessa State U, Odessa, 1954. (RZhKhim, No 7, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended
at USSR Higher Educational Institutions (16).

APPROVED FOR RELEASE: 06/09/2000

CIA-RDP86-00513R000205810011-3"

BOGATSKY, A.V.

79-2-18/58

AUTHORS:

Plisov, A. K., and Bogatskiy, A. V.

TITLE:

Configuration and Properties of Unsaturated Acids and their Derivatives
Part 6. Reactivity of Stereoisomeric Crotonic Acids and Their Esters.
(KONFIGURATSIIYA i svoystva nepredel'nykh kislot i ikh proizvodnykh. VI.
O reaktsionnoy sposobnosti stereoizomernykh krotonovykh kislot i ikh
efirov)

PERIODICAL:

Zhurnal Obshchey Khimii, 1957, vol 27, No 2, pp. 360-364 (U.S.S.R)

ABSTRACT:

The authors synthesized butyl, isobutyl, isoemyl and benzyl ethers of isocrotonic acid and benzyl ether of crotonic acid and described their properties. Crotonic acid with a melting point of 72° (trans-isomer) hydrogenates much slower than isocrotonic acid with a melting point of 14° (cis-isomer). The authors established the difference in the relative rates of hydrogenation of crotonic and isocrotonic acids; isocrotonic acid attracts hydrogen very easily. It is explained that the difference in the relative rates of hydrogenation exist also during reactions with different catalysts (pt, pd) in different solutions (alcohol, acetic acid) and at different temperatures. It was found that the increase in alcohol radical in the ester group leads to a reduction in the relative rate of

Card 1/2

79-2-18/58

Configuration and Properties of Unsaturated Acids and Their Derivatives
Part 6.

hydrogen addition and the difference becomes more noticeable when compared with different crotonic acid esters.

The trans- and cis- structures of the isocrotonic and crotonic acids and their esters were established on the basis of the differences in the relative rate of hydrogenation.

6 tables. There are 17 references, of which 8 are Slavic.

ASSOCIATION: Odessa State University

PRESENTED BY:

SUBMITTED: February 28, 1956

AVAILABLE: Library of Congress

Card 2/2

PLISOV, A.K.; BOGATSKIY, A.V.; BYKOVETS, A.I.; BOGATSKAYA, Z.D.

Synthesis of new sulfamide compounds. Trudy OTIPiKhP 9 no.2:97-100
'59. (MIREA 13:9)
(Sulfamide)

STEPANOVA, Ol'ga Sergeyevna; BOGATSKIY, Aleksiy Vsevolodovich;
GOLUB, A.M., otv.red.; TUBOLEVA, M.V., red.

[Chemistry in the service of people] Khimiia na sluzhbe naroda.
Kiev, 1960. 31 p. (Obshchestvo po rasprostraneniiu politicheskikh
i nauchnykh znanii Ukrainskoi SSR. Ser.5, no.12)

(MIRA 14:2)

(Chemistry)

BOGATSKIY, A.V.; STEPANOVA, O.S.

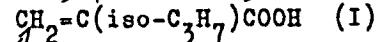
Reactions of primary and secondary alkyl halides with sodium malonate. Zhur. VKHO 5 no. 2:230 '60. (MIRA 14:2)

1. Odesskiy gosudarstvennyy universitet imeni I.I. Mechanikova.
(Alkyl halides) (Malonic acid)

5.340D 2209

³⁰⁸⁷²
S/073/61/027/006/004/005
B110/B147AUTHORS: Bogatskiy, A. V., Goryachuk, N. A.TITLE: Alkyl acrylic acids and their derivatives.
I. Synthesis of α -isopropyl acrylic acid and its esters

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, v. 27, no. 6, 1961, 782 - 784

TEXT: V. P. Gol'mov, N. M. Afanas'yev (Ref. 2: ZhOK, 22, 1953 (1952)) synthesized α -isopropyl acrylic acid (A) with 37% yield according to:
 $\text{CH}_3\text{OCH}_2(\text{iso-C}_3\text{H}_7)\text{C}(\text{COOC}_2\text{H}_5)_2 \xrightarrow{\text{saponification}} \text{CH}_3\text{OCH}_2(\text{iso-C}_3\text{H}_7)\text{C}(\text{COOH})_2$ 

heating $\xrightarrow{\text{heating}}$ $\text{CH}_3\text{OCH}_2\text{CH}(\text{iso-C}_3\text{H}_7)\text{COOH}$ I being obtained with ~60% yield.

The authors produced the methyl, ethyl, propyl, and isopropyl esters of A, which have not yet been described. Substances used: isopropyl malonate

Card 1/8 3

Alkyl acrylic acids and their...

30872
S/073/61/027/006/004/005
B110/B147

(boiling point 78 - 80°C/4 mm Hg, n_D^{20} = 1.4205) and according to Ref. 2 with 76% yield of obtained methoxy methyl isopropyl malonate (boiling point = 98 - 100°C/2 mm Hg, d_4^{20} = 1.0220, n_D^{20} = 1.4320, MR_D = 62.46). 363 g (~1.5 moles) of I was boiled 8 hr with 252 g of KOH in 420 milliliters of alcohol and 780 milliliters of H_2O . After alcohol had been distilled off, a small excess of H_2SO_4 (1:1) was added; the next step was extraction by ether; the ether extracts were dried by $CaCl_2$, and subsequently ether was distilled off. 1.4 moles residual I was heated 4 hr at 180 - 190°C. The following was obtained by vacuum fractionation (1) 55 g of α -isopropyl acrylic acid with 34% yield (boiling point 57 - 58°C/0.5 mm Hg, 61-62°C/2.5 mm Hg, d_4^{20} = 0.9549, n_D^{20} = 1.4310, MR_D = 30.92) as a colorless, sharply smelling liquid. (Table 1) (2) 125 g of β -methoxy- α -isopropyl propionic acid (B) with 60% yield (melting point 37 - 38°C, boiling point 79 - 82°C/0.5 mm Hg, n_D^{40} = 1.4240). 24 hr

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S/073/61/027/006/004/005
B110/B147

Alkyl acrylic acids and their...

heating at 300-350°C yielded three fractions: (a) methyl ester of B,
boiling point 38-40°C/3 mm Hg, (b) A, and (c) B. By repeating this
process, the yield of unsaturated acid can be raised to 60-65%. The
identity of methyl ester of B was proved by comparison (Table 2) with
synthesized ester (heating B for 4 hr with CH₃OH in the presence of
concentrated H₂SO₄). There are 2 tables and 3 references: 2 Soviet and
1 non-Soviet. The most recent reference to the English-language publica-
tion reads as follows: I. Simonsen, J. Chem. Soc., 96, 1776 (1906).

ASSOCIATION: Odesskiy gosudarstvennyy universitet im. Mechnikova
(Odessa State University imeni Mechnikov)

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BOGATSKIY, A.V.

Reaction of α -chloroethyl methyl ether with sodium alkyl malonates.
Zmir.ob.khim. 30 no.10:3500-3501 O '61. (MIRA 14:4)

1. Odesskiy gosudarstvenny universitet.
(Ether) (Malonic acid)

BOGATSKIY, A.V.; GORYACHUK, N.A.

B-Alkoxyethylisopropylmalonic esters. Zhur. ob. khim. 31 no. 7:
2419-2423 Jl '61. ~ (MIRA 14:7)

1. Odesskiy gosudarstvennyy universitet imeni. I.I. Mechnikova.
(Malonic acid)

PLISOV, A.K.; BOGATSKIY, A.V.

Configuration and properties of unsaturated acids and their derivatives. Part 14: Properties of esters of cis- and trans-petroselinic acids. Zhur.ob.khim. 31 no.10:3324-3326 O '61.
(MIRA 14:10)

1. Odesskiy tekhnologicheskiy institut vishchevoy i kholodil'noy promyshlennosti i Odesskiy gosudarstvennyy universitet imeni I.I.Mechnikova.

(Petroselinic acid)

BOGATSKIY, A.V. (Odessa)

A.M.Butlerov at the 7th Congress of Russian Natural Scientists
and Physicians. Vop.ist.est.i tekh. no.12:169-170 '62.

(MIRA 15:4)
(Butlerov, Aleksandr Mikhailovich, 1823-1886)

BOGATSKIY, A.V.; GORYACHUK, N.A.; PARNAK, G.I.

Synthesis and transformations of alkyl- α -alkoxyethylmalonic esters. Part 1: Methyl- α -methoxyethylmalonic ester. Zhur. ob. khim. 32 no.5:1498-1503 My '62. (MIRA 15:5)

1. Odesskiy gosudarstvennyy universitet imeni I.I.Mechnikova.
(Malonic acid)

BOGATSKIY, A.V.; P'YANKOVA, G.V.

Synthesis and conversions of alkyl- α -alkoxyethylmalonic esters.
Part 2: Synthesis of alkyl- α -propoxymethylmalonic and alkyl- α -isopropoxymethylmalonic esters. Zhur. ob. khim. 32 no. 6:1762-1764 Je '62.
(MIRA 15:6)

1. Odesskiy gosudarstvennyy universitet im. I.I.Mechnikova.
(Malonic acid)

BOGATSKIY, A.V.; GORYACHUK, N.A.

Synthesis of γ -lactones from γ -hydroxyacids. Zhur. ob. khim. 32 no.6:
2062 Je '62. (MIRA 15:6)

1. Odesskiy gosudarstvennyy universitet im. I.I.Mechnikova.
(Lactones) (Acids, Organic)

BOGATSKIY, A. V.; YABLONOVSKAYA, S. D.

Synthesis and transformations of alkyl- α -alkoxyethylmalonic esters. Part 4: Synthesis and some properties of methyl- α -isobutoxyethylmalonic ester. Zhur. ob. khim. 32 no. 12:3886-3888 D '62.
(MIRA 16:1)

1. Odesskiy gosudarstvennyy universitet imeni I. I. Mechnikova.

(Malonic acid)

BOGATSKIY, A. V.; GORYACHUK, N. A.; TISHCHENKO, O. I.; KIR'YAKOVA, A. A.

Synthesis and transformations of alkyl- α -alkoxyethylmalonic esters. Part 3: Synthesis and saponification of alkyl- α -methoxyethylmalonic esters. Zhur. ob. khim. 33 no.1:42-45
'63. (MIRA 16:1)

1. Odesskiy gosudarstvennyy universitet.

(Malonic acid) (Saponification)